

# Claims

[c1] What is claimed is:

1. An antenna carrier comprising:

a mast;

a mast clamp installed at one end of the mast rotatable with respect to the mast, said mast clamp comprising an extension arm; and

a fixture comprising a holder, a bolt, and a fine tune module with one end fixed to the extension arm, one end of the holder moveably connected to the fine tune module, the bolt moveably disposed in the holder for fixing the holder on one side of the mast.

[c2] 2. The carrier of claim 1 wherein the fine tune module comprises a studded bushing having a threaded stud rotatably disposed on the extension arm of the mast clamp, and a threaded rod having one end threaded into the studded bushing; studded bushing for moving along the threaded rod for tuning the rotation angle of the antenna on the antenna carrier.

[c3] 3. The carrier of claim 2 wherein the fixture has a fine tuning graduation and the extension arm of the mast clamp has a first pointer for pointing to a value of the

rotation angle of the antenna on the fine tuning graduation.

- [c4] 4.The carrier of claim 1 wherein one end of the fine tune module is movably disposed on the extension arm of the mast clamp.
- [c5] 5.The carrier of claim 1 wherein the mast comprises a support seat and a bushing for connecting the support seat and the mast clamp.
- [c6] 6.The carrier of claim 5 wherein the bolt is used for fixing the fixture on one side of the support seat.
- [c7] 7.The carrier of claim 1 further comprising a bracket having a first end disposed on the first end of the mast clamp and a second end rotatably disposed on the mast clamp for adjusting an elevation angle of the antenna.
- [c8] 8.The carrier of claim 7 further comprising a rotational fixture rotatably disposed on the bracket for adjusting the rotation angle of the antenna.
- [c9] 9.The carrier of claim 8 further comprising a support arm having one end disposed on the rotational fixture and another end supporting a low noise signal amplifier for receiving radio signals from the antenna.
- [c10] 10.The carrier of claim 8 wherein the antenna is dis-

posed on the rotational fixture.

- [c11] 11.The carrier of claim 1 wherein the extension arm is installed on the underside of the mast clamp.
- [c12] 12.The carrier of claim 1 wherein the bolt is a U-bolt.
- [c13] 13.A radio wave receiving device comprising:
  - an antenna device;
  - a carrier disposed with the antenna device;
  - a seat;
  - a connecting module connected to the carrier; and
  - a rotation angle fine tune module connected to the seat and the connecting module for adjusting a rotation angle of the carrier and the antenna.
- [c14] 14.The radio wave receiving device of claim 13 wherein the rotation angle fine tune module comprises a fixing unit and a fine tuning unit; the fixing unit is directly or indirectly disposed on the seat for fixing the fine tuning unit.
- [c15] 15.The radio wave receiving device of claim 14 wherein the fine tuning unit comprises a studded bushing, a threaded bushing, a threaded rod, and a choke unit; the studded bushing is set on the connecting module; the threaded bushing is set on the fixing unit; the studded bushing comprises a first hole having an internal diame-

ter larger than the diameter of the threaded rod and a threaded stud perpendicular to said first hole; the threaded bushing comprises a second hole matched to the thread of the threaded rod; the first end of the threaded rod is through the first hole, the choke unit is set on the threaded rod for limiting the range that the studded bushing can be moved along the length of the threaded rod; the second end of the threaded rod is through the second hole for moving the threaded bushing along the length of the threaded rod when the threaded rod is turned.

[c16] 16. The radio wave receiving device of claim 15 wherein the connecting module further comprises a locking module for fixing the connecting module on the seat to prevent changes in the rotation angle of the antenna.